

**International Harmonised Research Activities  
Vehicle Compatibility Working Group**

Minutes of the Third meeting, held at INSIA, on 21-22 January 1998

present:	K Rodgers	Chairman
	C A Hobbs	Secretary
	E Faerber	EEVC
	J Bloch	EEVC
	T Hollowell	USA
	Y Kadotani	Japan
	G Neat	USA – observing
	R W Lowne	EEVC - observing

Apologies for absence were received from Mr Welbourne and Mr Seyer.

The first part of the meeting (21 January 1998) was held jointly with EEVC WG15. It was agreed that copies of WG15 documents could be sent to Mr Welbourne and Mr Seyer.

**Action Mr Hobbs**

The minutes of the last meeting were agreed and the chairman outlined the status report presented to the IHRA Steering Committee in Geneva in November 1997.

### **Progress Reports**

#### **NHTSA**

Mr Hollowell presented two papers: Doc 9, Vehicle Aggressivity – Fleet Characterization Using Accident Data and Doc 10, The Aggressivity of Light Trucks and Vans in Traffic Crashes. He also presented an update of Doc 3, now Doc 3a. Mr Hollowell will supply copies of Doc 9 directly to members and copies of Docs 10 and 3a will be distributed with the minutes. Mr Hollowell explained that NHTSA's FE models are now available to EEVC WG15. Bi-lateral arrangements between NHTSA and both TNO and TRL are in place and working well.

**Actions Mr Hollowell & Mr Hobbs**

NHTSA have six crash tests planned between three LTVs (Ford Explorer and two others) and either a Honda Accord or Ford Taurus. Three tests will be side impacts and three frontal impacts. Mr Hobbs asked if the Mercedes Benz K class had been studied. He had been advised, by Keith Bradsher (New York Times), that the K class had a low front structure. Mr Hollowell will ask for a briefing on this from Mercedes Benz. He thought that it might be possible to have a car available for inspection at the time of the ESV conference. He explained that NHTSA were funding work at TNO to develop Madymo models of the Dodge Neon and possibly other cars for which they had FE models.

**Action Mr Hollowell**

#### **EEVC WG15**

Mr Faerber reported that the European Commission was now funding a joint research programme being carried out within WG15. The work includes: a literature study, accident analyses, a structural survey of cars, crash testing and simulation modelling.

## **TRL/DETR**

Mr Hobbs explained that the UK programme was continuing. The programme includes crash testing and modelling of both frontal and side impacts. The current work programme is still focussed on trying to determine which factors have the greatest influence on compatibility. He explained that a theoretical study was being made of influence of the shape of the car's deceleration pulse on seat belt induced injuries. There is some concern that the deceleration pulse generated in crash tests may be encouraging manufacturers to optimise restraint systems in a way that compromises their performance in accidents. Further work will be needed to obtain a better understanding of the extent to which this might occur.

## **Japan**

Mr Kadotani explained the Japanese work programme, Doc 11. A crash test programme has been developed but simulation modelling was not included. It was considered that available FE models were now too old. Data on fleet studies and accident analyses should be available in May 1998. The findings could be presented at the next meeting.

**Action Mr Kadotani**

## **Canada**

Mr Hobbs presented the Canadian Status report, which he had received from Mr Welbourne, Doc 12.

## **IHRA Activities**

The chairman presented a flow chart and time schedule for the IHRA work programme, Doc 13. There was some discussion and the chairman agreed to make some amendments including making the third section less prescriptive; eg "assessment" rather than "test" method. The document will be re-issued as Doc 13a. The schedule will have the Japanese work added. Mr Faerber will supply information on the EEVC programme and blanks will be added for the Australian and Canadian programmes. These can be filled as information is received.

**Actions Mr Rodgers, Mr Welbourne & Mr Seyer**

## **ESV Conference**

The IHRA report to ESV will detail the activities in hand and planned. Reference will be made to other presentations at the conference. It is hoped that a meeting will be possible at the time of the ESV conference, possibly on the Thursday evening. Following the conference, Mr Hollowell will invite interested EEVC WG15 members to an informal meeting at George Washington University to discuss their FE modelling work.

**Actions Mr Rodgers & Mr Welbourne**

**Representation from Industry**

At the Geneva meeting, the IHRA Steering Committee agreed to representation from industry at IHRA working group meetings. OICA will be asked to nominate up to three representatives, one each from Asia/Pacific, Europe and North America. The chairman will write to OICA inviting representatives.

**Action Mr Rodgers**

**Other Business**

Prof Lowne asked for the group's view about frontal impact testing with a mobile deformable barrier. The group currently saw no disadvantages relating to compatibility. Future research should confirm this or identify problems.

Mr Hollowell mentioned the SAE Top Tech conference he is organising in August. The subject is small car safety and presentations were sought. Mr Hobbs was asked if he could report on the crash test experience of small cars, Mr Faerber was asked if he could make a presentation on Compatibility and a presentation was sought on the future of small cars. It was thought that Dr Broughton (TRL) might be willing to make a presentation on his analyses.

**Actions Mr Hobbs & Mr Faerber**

IRCOBI and AAAM are to produce a joint journal: "Crash Protection and Injury Control." Mr Hollowell will be responsible for the crashworthiness aspects.

**Next Meeting**

No final arrangements were made for the next meeting. As stated earlier, it is hoped that a short meeting will be possible at the ESV conference.

Adrian Hobbs  
Technical Secretary

1 December, 2000